

## **Introduction**

The Howard County Council passed Bill 38 on Monday May 5, 2014 requesting that the Environmental Sustainability Board (ESB) evaluate the environmental impacts of a Natural Wood Waste Facility in Howard County and report back to them by May 24. Wood wastes are currently transported to various facilities today in the county, where they are ground up, kept in piles as they decompose into mulch, turned and wetted down on a periodic basis, and then they are used on site or shipped off to be used on a range of agricultural, residential and commercial applications. They have the potential to impact air, water, roads, and neighbors. This is our report of our review of these issues.

After circulating and reviewing numerous documents from the county, the state, and the residents, the Howard County Environmental Sustainability Board met on May 8 at the Robinson Nature Center to hear from County representatives and to discuss the major issues related to these types of facilities. During the session, Marsha McLoughlin, director of the Department of Planning and Zoning and Jeff Daniels, Chief of Operations of the HC Bureau of Environment and Zoning and Jeff Daniels, Chief of Operations of the HC Rural Preservation Society (DRPS) had the opportunity to identify any other issues that were not addressed by the board. DRPS had the attended and they offered comments as time allowed. At the end of the meeting DRPS had the identified by the community. The DRPS had the opportunity to drill down on the major issues services briefed the board and the board had the opportunity to drill down on the major issues identified and they offered comments as time allowed. At the end of the meeting DRPS had the attended and they offered comments as time allowed. At the end of the meeting DRPS had the members of the volunteer board are drawn from each of the council districts and from a range of professional disciplines. The members have considerable knowledge in storm water management, groundwater, ecology, health, agriculture, soil, water and air chemistry, transportation, and engineering. Here are ESB's findings.

To adequately evaluate a complex topic such as this one we recommend following the principals of the triple bottom line which seeks to consider a full range of issues categorized into economic, social and environmental arenas. We have focused largely on the environmental issues in our work but do not believe this is adequate without a short discussion of the other areas.

## **Sustainability**

Economic – All sectors of our society continuously generate wood wastes (agricultural, commercial, and residential). Furthermore, if we as a country allow growth to continue, then we will cut down even more trees to make way for more buildings and roads. As we do this we also create the responsibility not to burn these wood products, dump them into ravines or in landfills,

## **Natural Wood Waste Facilities Issues Related to**

**May 16, 2014**

### **Sustainability Board**

### **Report of Findings of the Howard County Environmental**

remediated, and corrective actions enforced? Is a substantial risk, we will need to determine how the sites will be monitored. We need to be able to evaluate these risks and determine if they can be mitigated? If there that the exposure levels will be high for anyone other than those working at the facility. important in disease incidence, especially respiratory ailments, however, it is not clear fungi and other substances that could cause problems. Environmental stressors are from grinding the wood into mulch. In addition to particulate matter, much contains In addition to hydrocarbon pollution, these facilities may also generate dust (and odors)

pollution generated from landfilling, farming, or residential development. from the proposed wood waste facilities compares to other sources as well as the moving away from the use of fossil fuels. We need to know how the pollution generated Our society is trying to mitigate these sources by becoming more energy efficient and that produce our electricity and the large amounts of car and truck traffic on our roads. quality is a real issue in Howard County. Our air is polluted from coal fired power plants into context so we have some perspective on the impacts of the proposed facilities. Air quality - We suggest that there is a need to put many of the environmental questions

#### Environmental - We have identified the following environmental concerns:

However, some large and/or unmonitored facilities have had negative impacts such as catching fire and contamination of groundwater. They generate truck traffic, produce noise and dust pollution. It is clearly understandable that residents near proposed facilities have concerns that must be addressed. We all want to live in an area with healthy surroundings. The question we need to be addressed is what are the real concerns, can they be mitigated, and how do they compare with the alternatives.

Social - There are thousands of much operations across the county, many are operating apparently with very little negative impacts on the surrounding area. They are a common occurrence in many rural areas because they are an essential part of landscaping and agricultural operations.

Critical to this discussion and a topic we have not had the time to explore is "what is the right size operation from an economic, environmental and social (safety) perspective?" To meet the monitoring concerns discussed below might require a large enough operation to pay for such services. Smaller operations may at first appear to be safer from some perspectives but they may not be better. We suggest that the council does not rush into limiting the size of these facilities without considering the optimal size for meeting all of our community needs for a safe and sustainable facility. You may need to engage county staff or outside experts to determine this.

Commercial, residential and agricultural sectors. recycling operation is an important service for our county, meeting the local needs of our essential for agriculture. It helps us reduce the need for chemical additives. A wood waste has a significant market value right here in Howard County and even more importantly, is create ever bigger problems. Fortunately, the recycling of wood produces a product, much, that or ship them out of county. These alternatives, some of which we pursued in the past, can

**Firldimngs** – Wood Waste recycling needs to be an important component in managing our wastes responsibly. However, there are numerous questions that need to be addressed relative to the

- improvements by the proponent can be included in the terms of the conditional use.
- who will improve the roads if that is necessary? Times of operations and even road be needed if there is to be a lot of traffic to and from the site. We should also determine attenuation structures (trees) or limiting times of operation. A traffic and road study may conductimg a sound study at sensitive receptors (neighbors) and creating sound acceptable level at the borders to the property. This may need to be addressed by the finished product to market. Trucks will be needed to keep sound and vibration at an much piles on a regular interval. Trucks will bring the wood wastes to the site and take heavy equipment to move the wood around, to grind it up into mulch and to turn the
- Other (Sound, vibration, traffic, road repair) – Wood waste processing facilities require

facilities should provide adequate protection if enforcement is performed regularly. NPDs permit required as part of the state permitting of natural wood waste recycling activities that are unregulated. We need to have a way to monitor all sites. The industrial impact from these sites may be on the order of impacts that occur from agricultural

may also be geotechnical that would allow the capture of leachate. In order to capture this leachate but this may be too expensive for most operations. There piedmont due to their heterogeneous nature. An alternative could be the paving of the site may be required. However it is not easy to monitor the fractured rock aquifers in the wells are not contaminated? In addition to a good management plan, better monitoring reservoirs, and the Bay. How do we ensure that these water bodies and adjacent water groundwater beneath the site and from flowing into nearby streams, drinking water these facilities to limit any potential leachate from the mulch piles from contaminating Rainfall and water use during the decomposition process will have to be managed on

- recharge our groundwater tables.
- reduce stormwater runoff by capturing it and allowing it to filter into the ground and surface waters and our groundwater throughout the county. There is a big push now to reduce stormwater runoff by capturing it and allowing it to filter into the ground and gas), and pesticides from our backyards, our streets, and our farms have contaminated our environment release but not necessarily a property or human loss. It may be more of a money and resource issue. Perhaps the proponent could be charged for fire service as a motivation for proper management.
- Water Quality (groundwater and stormwater) – Runoff of fertilizer, hydrocarbons (oil and

site to supply the water needed to put a fire out? A wood waste fire would be an enough to meet the needs of our fire fighters, should we require a pond to be built on the need to know what is the response plan for a fire if it occurs. If our cisterns are not large reduce the likelihood of fire. This may require periodic monitoring and enforcement. We Some mulch piles have caught on fire. We need to understand how to manage the sites to

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- siting, management, and monitoring of wood waste facilities. We suggest that the county work closely with the state to resolve these questions and to ensure that wood waste recycling can be done safely and successfully in the county. The County needs to establish "Development Guidelines" and create the ability to enforce permit requirements as a part of approval process.
- We should find a way that agricultural based mulching can be done in a safe and effective manner and allow for incorporation of offsite components. We may need to establish a threshold of impact level from agriculture that cannot be passed and create a process that works toward reducing those impacts further over time.
- We also need to find a way for larger operations to be sited in the county that avoids the potential problems that have occurred at some larger scale facilities. It may be that larger air and water quality as well as noise, visibility, traffic and pollution etc. This would then be reviewed and approved by the County before approval is granted or permit is issued. This report would help ensure that the public safety and other issues and concerns will be addressed during the design and provide a mitigation plan for any impact that can't be addressed directly by the design.
- In addition to designing management plans that will limit the likelihood of problems, there may need to be a way to monitor air and water quality on an ongoing basis. Farms following best management practices as part of their Conservation Management Plans should be allowed to continue their mulching operations.
- Facilities of all sizes need to be inspected on a periodic basis and a clear enforcement strategy is needed for ensuring facilities are operated in a manner that will protect human health and the environment.
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## Suggestions